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# **THYRATRON** MERCURY-VAPOR TRIODE

**Electrical:**DATA

Heater, for Unipotential Cathode:

Voltage\* . . . . . 5 . . . . . volts

Current . . . . . 10 . . . . . amp

Direct Interelectrode Capacitance:

Grid to Anode (Approx.) 5 . . . . .  $\mu$ uf

Peak Voltage Drop . . . . . 12 . . . . . volts

Control Characteristic. . . . . Negative

Ionization Time (Approx.) 10 . . . . .  $\mu$ secondsDeionization Time (Approx.) 1000 . . . . .  $\mu$ seconds**Mechanical:**

Mounting Position . . . . . Vertical, Base Down

Overall Length. . . . . 11-1/4"  $\pm$  1/2"

Maximum Diameter. . . . . 3-13/16"

Bulb. . . . . ST-30

Cap . . . . . No. 3985

Base. . . . . Large Shell Super-Jumbo 4-Pin

**Maximum Ratings, Absolute Values:**

For frequencies up to 150 cycles

	Continuous <u>Service</u>	Welder- Control <u>Service</u>	
PEAK FORWARD ANODE VOLTAGE	2500 max.	750 max.	volts
PEAK INVERSE ANODE VOLTAGE	2500 max.	750 max.	volts
PEAK GRID VOLTAGE:			
Before Conduction . . . . .	-500 max.	-500 max.	volts
PEAK ANODE CURRENT. . . . .	40 max.	77 max.	amp
AVERAGE ANODE CURRENT . . . .	6.4 max.	2.5 max.	amp
SURGE ANODE CURRENT for 0.1 sec. max.	200 max.	200 max.	amp
GRID CURRENT: Before con- duction (Grid Negative)	5 max.	5 max.	$\mu$ amp
PEAK GRID CURRENT . . . . .	1 max.	1 max.	amp
AVERAGE GRID CURRENT. . . . .	0.25 max.	0.25 max.	amp
TIME OF AVERAGING CURRENTS.	15 max.	5 max.	sec
COND.-MERCURY TEMP. RANGE <sup>A</sup>	40 - 80	40 - 90	$^{\circ}$ C

\* Heater voltage must be applied for at least 5 minutes before anode voltage is applied.

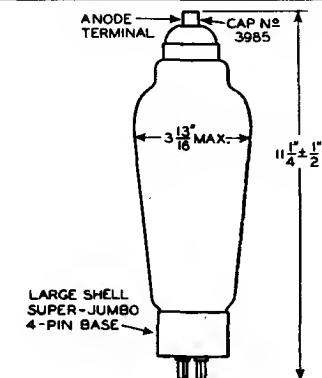
<sup>A</sup> Recommended condensed-mercury temperature range, 45 - 55 $^{\circ}$ C.

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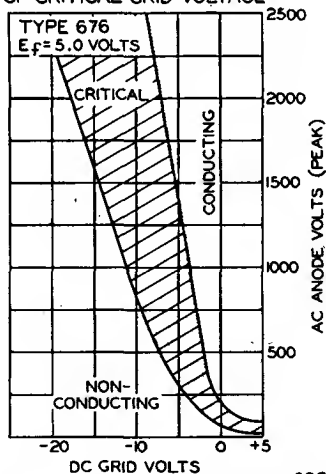


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## OPERATIONAL REGION OF CRITICAL GRID VOLTAGE



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MAY 1, 1946

TUBE DIVISION  
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

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